Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1. (canceled)
2. (canceled)
3. (canceled)
4. (canceled)
5. (canceled)
6. (canceled)
7. (canceled)
8. (canceled)
9. (canceled)
10. (canceled)
11. (canceled)
12. (canceled)
13. (canceled)
14. (canceled)
15. (canceled)
16. (currently amended) An optical pick-up, comprising:

a diffraction grating body, comprising a base material, and a relief diffraction grating formed on the base material, wherein

the diffraction grating body is formed of a single base material, and the refractive index n1 of the single base material is 1.9 or more,

the diffraction grating is formed of a concave portion and a convex portion having rectangular shaped cross sections, and the level difference h between the concave portion and the convex portion satisfies the following relationship:

$$h=\lambda 1/(n1-1)$$

and the difference in an optical path between the concave portion and the convex portion is set to correspond to one wavelength with respect to the wavelength λ1, and

a material of the single base material is at least one material selected from the group consisting of Ta_2O_5, TiO_2, ZrO_2, Nb_2O_3, ZnS, $LiNbO_3$ and $LiTaO_3$;

a first semiconductor laser light source for emitting a light beam with wavelength λ1;

a second semiconductor laser light source for emitting a light beam with wavelength λ2;

an optical system having an optical disk, the optical system for receiving the light beam with wavelength λ1 and the light beam with wavelength λ2 and converging the light beam onto a microspot on the optical disk;

a diffraction means provided as a separate element from the diffraction grating body, the diffraction means being arranged for diffracting a light beam reflected from the optical disk;

and

a photodetector having a photo detecting portion for receiving the diffracted light diffracted by the diffraction means to output electrical signals in accordance with the amount of the diffracted light; wherein

the diffraction grating body receives the light beam with wavelength λ2 and transmits a main beam and generates sub-beams that are ± first order diffracted light, and

the photo detecting portion comprises a photo detecting portion PD0 for receiving a + first order diffracted light from the diffraction means, and a distance d1 between the center of the photo detecting portion PD0 and the light emitting spot of the first

semiconductor laser light source and a distance d2 between the center of the photo detecting portion PD0 and the light emitting spot of the second semiconductor laser light source substantially satisfy the following relationship:

$\lambda 1/\lambda 2=d1/d2$.

17. (canceled)

18. (previously presented) The optical pick-up according to claim 16, wherein the diffraction grating body, the semiconductor laser and the photodetector are integrated into one package.

19. (currently amended) An optical information apparatus, comprising:

an optical pick-up, comprising:

a diffraction grating body, comprising a base material, and a relief diffraction grating formed on the base material, wherein the diffraction grating body is formed of a single base material, and the refractive index n1 of the single base material is 1.9 or more, the diffraction grating is formed of a concave portion and a convex portion having rectangular shaped cross sections, and the level difference h between the concave portion and the convex portion satisfies the following relationship:

$h=\lambda 1/(n1-1)$

and the difference in an optical path between the concave portion and the convex portion is set to correspond to one wavelength with respect to the wavelength $\lambda 1$, and

a material of the single base material is at least one material selected from the group consisting of Ta_2O_5, TiO_2, ZrO_2, Nb_2O_3, ZnS, $LiNbO_3$ and $LiTaO_3$;

a first semiconductor laser light source for emitting a light beam with wavelength $\lambda 1$;

a second semiconductor laser light source for emitting a light beam with wavelength λ2;

an optical system having an optical disk, the optical system for receiving the light beam with wavelength λ1 and the light beam with wavelength λ2 and converging the light beams onto a microspot on the optical disk;

a diffraction means provided as a separate element from the diffraction grating body, the diffraction means being arranged for diffracting a light beam reflected from the optical disk;

a photodetector having a photo detecting portion for receiving the diffracted light diffracted by the diffraction means to output electrical signals in accordance with the amount of the diffracted light; wherein

the diffraction grating body receives the light beam with wavelength λ2 and transmits a main beam and generates sub-beams that are ± first order diffracted light, and

the photo detecting portion comprises a photo detecting portion PD0 for receiving a + first order diffracted light from the diffraction means, and a distance d1 between the center of the photo detecting portion PD0 and the light emitting spot of the first semiconductor laser light source and a distance d2 between the center of the photo detecting portion PD0 and the light emitting spot of the second semiconductor laser light source substantially satisfy the following relationship:

$\lambda 1/\lambda 2=d1/d2$;

a focusing control means for focusing the light beams on the optical disk;

a tracking control means for tracking the light beams on the optical disk; and

an information signal detecting means for detecting the output electrical signals;

and further comprising:

a moving means for moving the optical pick-up; and

a rotating means for rotating the optical disk.